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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,415	05/09/2001	Shunpei Yamazaki	12732-036001/US4906	1902

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EXAMINER

KOVALICK, VINCENT E

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/851,415	Applicant(s) YAMAZAKI ET AL.	
	Examiner Vincent E Kovalick	Art Unit 2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-38, 40 and 41 is/are allowed.
- 6) ☒ Claim(s) 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Applicant's Amendment and Request for Continued Examination dated October 18, 2004, to USPTO Final Office Action dated June 16, 2004.

Applicant's remarks relative to claim 39 are rendered moot in light of the amendment to claim 39. Claim 39 stands rejected based on the teachings of the prior art as set forth hereinbelow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harkin (USP 6,327,376) taken with Soini et al (USP 6,445,932) in view of Umeya (USP 6,028,581).

Relative to claim 39, Harkin **teaches** an electronic apparatus comprising a fingerprint sensing device (col. 2, lines 39-67; col. 3, lines 1-67; col. 4, lines 10-67 and col. 5, lines 1-30); Harkin further **teaches** a mobile information communication device (col. 10, lines 1-28 and Figs. 7-8); and a liquid crystal display(LCD) device (item 70 in Figs. 7-8) provided in said mobile information communication device; said liquid crystal.

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Harkin **does not specifically teach** said liquid crystal display including a pixel portion having a plurality of pixels, each of said pixels comprising: a pixel thin film transistor having a source region, a drain region and a gate electrode; a source signal line connected to the source region; a liquid crystal element and a storage capacitor connected to the drain region; a gate signal line connected to the gate electrode; and a capacitance line connected to the storage capacitors, said pixel portion as described being well known in the makeup of liquid crystal display devices.

Because said structure is in common practice and well known in the art, it would have been obvious to a person of ordinary skill in the art at the time of the invention that said pixel panel as described hereinabove would have been included in the LCD as taught by Harkin.

Harkin **does not teach** a flash memory, wherein said LCD comprises photo diodes provided for respective pixels, and wherein individual information of a user is stored in said flash memory.

Harkin teaches an electronic apparatus comprising a LCD and a finger print sensing device.

Soini et al. **teaches** a multi-service mobile station (col. 2, lines 32-67 and col. 3, lines 1-45);

Soini et al. further **teaches** a flash memory wherein individual information of a user is stored in said flash memory (col. 6, lines 65-67 and col. 7, lines 1-8);

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Harkin the feature as taught by Soini et al. in order to provide a nonvolatile storage means for storing data secured from being accidentally purged.

Harkin taken with Soini et al. **does not teach** said LCD comprising photo diodes provided for respective pixels.

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Harkin taken with Soini et al. teaches a liquid crystal device provided in a mobile information communication device wherein the said LCD comprises photo diodes provided for respective pixels.

Umeya **teaches** an apparatus for a Liquid Crystal Display having an input function (col. 2, lines 55-67 and col. 3, lines 1-10); Umeya further **teaches** said LCD comprising photo diodes provided for respective pixels col. 2, lines 55-67).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide to the device as taught by Harkin taken with Soini et al. the feature as taught by Umeya in order to provide a solid state image display device that lends itself to application in miniature hand-held electronic devices.

Allowable Subject Matter

4. Claims 1-38 and 40-41 allowed.

5. The following is an examiner's statement of reasons for allowance:

Relative to claims 1, 3, 21, 23 and 40, the major difference between the teachings of the prior art of record (Harkin, USP 6,327,376; Soini, USP 6,445,932 and Umeya, USP 6,028,581) and that of the instant invention is that said prior art of record **does not teach** a built in image sensor, or an image sensor constructed of photo diodes comprising a first thin film transistor having a first source region, a first drain region and a first gate electrode; a sensor gate signal line connected to the first gate electrode; a sensor output wiring connected to one of the first source and drain regions; a second thin film transistor having a second source region, a second drain region and a second gate electrode; a reset gate signal line connected to the second gate electrode; and a sensor power source line connected to the second drain region; a storage device; a module for

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judging whether the user can be identified or not by comparing individual information read by said image sensor with individual information stored in said storage device and a module for transmitting a result of the authentication via the Internet; or a means for collating individual information read by said image sensor with user's individual information stored in a flash memory.

Regarding claims 26 and 36, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a user identity authentication method using a mobile information communication device provided with a liquid crystal display device having first and second front lights and comprising a built-in image sensor, said method comprising: a step of reading individual information of a use with said image sensor when the first front light is lit up; a step of displaying an image when the second front light is lit up; and a step of authenticating a user's identity based on said individual information or a step of transmitting said individual information via the Internet; wherein the first and second front lights are not lit up simultaneously.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No.	6,456,279	Kubo et al.
U. S. Patent No.	6,476,374	Kozlowski et al.
U. S. Patent No.	6,070,796	Sibu

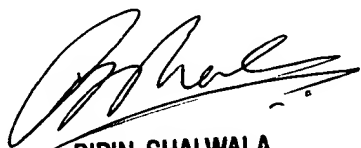
Responses

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E Kovalick whose telephone number is 703 306-3020. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703 305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Vincent E. Kovalick


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